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Limerick Generating Station

PECO ENERGY

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10CFR 50.73

May 31, 1994
Docket No. 50-353
License No. NPF-85

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

SUBJECT: Licensee Event Report
Limerick Generating Station - Unit 2

This LER concerns the failure to comply with Technical Specifications Section 3.7.7, "Fire Rated Assemblies," and the associated ACTION within the specified time, in that a one hour firewatch inspection was not performed due to cognitive personnel error.

Reference:	Docket No. 50-353
Report Number:	2-94-005
Revision Number:	00
Event Date:	February 19, 1994
Report Date:	May 31 , 1994
Facility:	Limerick Generating Station P.O. Box 2300, Sanatoga, PA 19464-2300

This LER is being submitted pursuant to the requirements of 10CFR50.73(a)(2)(i)(B).

Very truly yours,

Robert W Boyce

DBN:cah

cc: T. T. Martin, Administrator Region I, USNRC
N. S. Perry, USNRC Senior Resident Inspector, LGS

IE22
1/1

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

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TITLE (4) Failure to comply with Technical Specifications Section 3.7.7 in that a one hour firewatch inspection was not performed due to cognitive personnel error.

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
										0 5 0 0 0
0 2	1 9	9 4	9 4	0 0 5	0 0	0 3	1 9	9 4		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
1		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
1 0 0		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
J. L. Kantner, Manager - Experience Assessment, LGS	6 1 0 3 2 7 - 1 2 0 0

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On 02/19/94, at 1000 hours, contracted security force personnel identified that the two previous hourly firewatch patrols of an area in the Unit 2 Reactor Enclosure had not been performed by the assigned Security Force Member (SFM). The patrol was required per the action of Technical Specification (TS) Section 3.7.7 due to an inoperable fire rated boot seal contained in the floor of the specific area. The patrol was performed at 1006 hours. This event was originally determined to be not reportable since adequately trained workers were in the area at the time of the missed inspections. The NRC concluded that such workers did not meet the TS requirements and the event resulted in a condition prohibited by TS. The defense in depth concept utilized in the design and operation of the plant make the actual and potential consequences of this event extremely minimal. The primary cause of this event was personnel error. The SFM became focused on the other responsibilities and forgot to perform the patrol as stipulated in the written post orders. The specific SFM was appropriately disciplined. All SFMs have been briefed on the event. A shift security supervisor will notify the assigned security responder prior to the time that the next firewatch patrol inspection is to be performed.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Unit Conditions Prior to the Event:

Unit 2 was in Operational Condition 1 (Power Operation) at 100% power level.

An hourly firewatch patrol had been established on February 6, 1993, in accordance with the action requirements of Technical Specifications (TS) Section 3.7.7, "Fire Rated Assemblies," due to an inoperable fire rated boot seal (EIIS: KP,SEAL). The inoperable boot seal is located in the Unit 2 Reactor Enclosure on elevation 201 feet in area 14. Patrols of the area were being performed on an hourly basis.

Description of the Event:

On February 19, 1994, at 1000 hours, contracted security force personnel identified that the two (2) previous hourly firewatch patrols of the Unit 2 Reactor Enclosure elevation 201 feet area 14 had not been performed by the assigned Security Force Member (SFM). The patrols were required to be performed by 0842 and 0942 hours. The security shift sergeant dispatched a SFM to the location and the patrol was performed and documented at 1006 hours.

During an investigation into the event, it was discovered at 1145 hours, that two (2) contracted workers were working in this specific area between 0800 and 1000 hours. The workers were transferring scaffolding through the area, walked near the boot seal, and were frequently in the area when the firewatch patrol was required. In accordance with a long standing written position, this event was determined not be not reportable since there was operable fire detection in the area and trained personnel were in the area who performed an adequate inspection during each hourly interval in the period of time the barrier was inoperable. This event was investigated and appropriate corrective actions implemented in accordance with PECO Energy Nuclear Generation Group's Performance Enhancement Program.

During a Special NRC inspection, an NRC inspector questioned the use of workers as substitutes for the assigned firewatch patrol and concluded that the action requirements of TS Section 3.7.7 were not met and a condition prohibited by TS occurred. During a followup discussion involving PECO Energy and NRC personnel, conducted on April 25, 1994, PECO Energy personnel provided the basis for why the event should not be considered a violation of TS Section 3.7.7. Our conclusion was based on the following:

1) The firewatch patrol was established on February 9, 1993, in accordance with TS Section 3.7.7 and Administrative (A) procedure A-12.1, "Control of Technical Specification Continuous Firewatches and Hourly Firewatch Patrols."

2) The basis for determining that this event was not reportable is documented in an approved and controlled position paper and has been in place since June 28, 1985.

3) The two workers were trained in General Employee Training (GET) as part of being granted unescorted access to the station. The GET provides sufficient training to qualify individuals to perform hourly firewatch patrols. This training provides instructions to workers on how to report indications of a fire or other degraded conditions to the Main Control Room. This training is also part of the basis for the position paper.

4) The two workers were frequently in the specific area when the hourly firewatch patrol inspections were required and walked past the inoperable fire rated assembly during their work. The amount of time the workers were in the area was significantly longer than the time the nourly firewatch patrol spends in the area.

5) The event did involve a failure to comply with an administrative procedure in that the hourly firewatch patrol was not documented. The type of event is not reportable per NUREG 1022, "Licensee Event Report System," since the missed requirement was only administrative, did not affect plant operation, and was a single instance of non-compliance.

The NRC responded in Combined NRC Inspection Report Nos. 50-352/94-11 and 50-353/94-11 dated May 17, 1994 that this event was a non-compliance of TS Section 3.7.7. The NRC concluded that it was not demonstrated that the contract workers in the area provided adequate hourly inspections to satisfy the TS requirement and that the contracted workers being in the area did not fully meet the requirements for the hourly fire watch patrol. However, their presence did mitigate the consequences of the missed watch.

This report is being submitted within 30 days of the date when the NRC informed PECO Energy of their conclusion that this event resulted in a condition prohibited by TS. This type of event is reportable per the requirements of 10CFR50.73(a)(2)(i)(B).

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Analysis:

The actual and potential consequences of this event are extremely minimal.

The defense in depth concept utilized in the design and operation of Limerick Generating Station (LGS) make the probability of a fire extremely remote. The design of the plant established early warning fire detection (EIIS:DET) on both sides of the floor that contains the boot seal. Additionally, there is an automatic fire suppression system (EIIS:SRNK) located in area being patrolled. Annunciation for these systems is provided in the Main Control Room. Procedures and training have been implemented for the response to the detection of a fire and includes actuation of a TS required fire brigade. Administrative controls exist that maintain the amount of combustible material in the plant to very low levels. Additionally, these administrative controls stipulate stringent requirements for the use of ignition sources in the plant including a dedicated firewatch accompanied with a portable fire extinguisher. There were no transient combustibles nor ongoing ignition source work nor an actual fire on either side of the floor containing the boot seal at the time when the SFM did not perform the hourly firewatch patrols.

Cause of the Event:

The primary cause of this event was personnel error. Due to ongoing modification work on Unit 1, the normal SFM assigned to perform the hourly firewatch patrol could not patrol both the Unit 1 and Unit 2 Reactor Enclosures within one hour. In accordance with security standard Operating Procedure 12, a "Special Order" was written on February 7, 1994 to assign to the security responder position the responsibility to perform the hourly firewatch patrol of the Unit 2 area containing the boot seal. The special instructions were then included in the post orders for the security responder position. On February 19, 1994, the assigned SFM read the post orders and was aware of his firewatch patrol responsibilities. However, the SFM became focused on other responsibilities and forgot to patrol the area containing the boot seal.

Corrective Actions:

The SFM involved in this event was appropriately disciplined. All SFMs have been briefed on this event, the requirements of the standard operating procedures and the need for attention to detail.

A shift security supervisor has been assigned the responsibility to notify the assigned security responder prior to the time that the next firewatch patrol is to be performed. This backup action has been incorporated into the appropriate security procedure.

Previous Similar Occurrences:

LGS LERs 2-92-011 and 2-93-012 also reported a failure to meet the one hour firewatch time limit of TS Section 3.7.7. due to cognitive personnel error. The corrective actions developed for the two previous LERs were deemed to be not sufficient and therefore the additional barrier of involving the shift security supervisor was established as discussed in the corrective actions section of this LER.